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NOTES ON SOME GENERA AND SPECIES OF THYSANOPTERA NEW TO THE BRITISH FAUNA.

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Very little attention has been given to the *Thysanoptera* by British Naturalists since Haliday's papers* on the subject were published more than half a century ago, though it is an Order of more than usual economic interest. An excellent Monograph of them has been written by Prof. Uzel and of the species which he recognises no less than one hundred are from his own country, Bohemia. Prof. O. M. Reuter, of Helsingfors, has also added much to our knowledge of the *Thysanoptera*, whilst more recently Mr. W. E. Hinds has contributed a paper towards a Monograph of the North American forms.†

During my spare moments, unfortunately much limited, I have this year collected a large number of Thrips of which more than one half yet await identification, but of those named with reasonable certainty many are of special interest, and in a paper to be published shortly by the Natural History Society of Northumberland, Durham and Newcastle-on-Tyne, an account of these creatures will be given. The following species are now worthy of note, as, with the exception of Liothrips setinodis, Reut., and Aptinothrips nitidula, Hal., all are, so far as I am aware, new to the fauna of Great Britain, whilst representatives of the genera Megalothrips, Uzel, Uzeliella, mihi, Oxyothrips, Uzel, and Parthenothrips, Uzel, were previously unknown as British.

Sub-Order TUBULIFERA.

Megalothrips lativentris, Heeger.

Phlæothrips latirentris, Heeger, Sitzungsb. d. Akad. d. Wiss. Wien, ix, p. 479, pl. xviii, 1852: Phlæothrips longispina, Reuter, Diagn. öfv. nya Thysanoptera f. Finland, p. 8, 1878—79: P. tibialis, Idem ibidem, p. 9: P. longispina, Reuter, Thysanoptera Fennica, p. 8, 1880: P. tibialis, Idem ibidem, p. 10: Megalothrips lativentris, Uzel, Monographie der Ordnung Thysanoptera, p. 225, pls. iii and vii, figs. 20, 22, 23, 115, 116, and 117. 1895.

One of the largest European species; the sexes are very different

^{*} Entomological Magazine, vol. iii, 439-451; vol. iv, 114-146, 1837; and in Walker's "List of the specimens of Homopterous Insects in the Collection of the British Museum," pt. iv, Order iii, *Physapoda*, pp. 1094-1118, plates v-viii, 1852.

[†] Proc. U. S. Nat. Museum, vol. xxvi. † Öfversight af Finska Vctanskaps-Societctens Förhandlinger. Helsingfors, 21.

[§] Bidrag till Kännedom af Finlands Natur och Folk.

in structure, so much so that Reuter described them as two species, the \Im under the name of *tibialis*, and the \Im as *longispina*.

In June of this year (1907) Dr Randell Jackson sent me a large \circ from Delamere Forest, and later he was fortunate enough to secure further specimens, including a single example of the \circ . They were found amongst fallen leaves lying on a bank clothed with heather and bilberry.

Distribution. Vienna (a. d., 1818, Ritter v. Goldegg and later Heeger), Finland (Reuter), and Bohemia (Uzel).

Liothrips setinodis, Renter.

Phlæothrips setinodis, Reuter, The Scottish Naturalist, v, p. 310, 1880: Liothrips setinodis, Uzel, Mon. der Ordn. Thysanoptera, p. 263, pl. vii, fig. 147, 1895.

Another fairly large species, of which I have taken a fine ? on elm (31.VIII.07), Gibside, Co. Durham. Uzel says that it is found on the under-side of oak leaves and, in the winter, in moss.

Distribution. Scotland (Reuter) and Bohemia (var. pragensis only, Uzel).

Trichothrips cæspitis, Uzel.

Trichothrips cæspitis, Uzel, Mon. der Ordn. Thysanoptera, p. 248, 1895.

A single example, apparently referable to this apterous species, taken at Gibside in moss. It is one of the smallest forms, being less than a millemètre in length and is easily recognised from the closely allied *T. pedicularia*, Haliday, and *T. semicæca*, Uzel, by its small size, the absence (or abbreviation) of the ocelli, and by the comparatively short proboscis, which only extends to the middle of the prosternum. My specimen does not agree, however, with the published description in the coloration of the head.

Uzel says that the species is a turf-dweller (Rasenbewohner), whereas others of the genus are invariably found under bark, or in *Polyporus*.

Sub-Order TEREBRANTIA.

Euthrips robusta, Uzel.

Physopus robusta, Uzel, Mon. der Ordn. Thysanoptera, p. 104, pl. v, figs. 55 and 56, 1895.

In the flowers of the field scabious (*Scabiosa arvensis*) at Hart and near Blaydon-on-Tyne, Co. Durham, August and September. Apparently very local.

Distribution. Bohemia (Uzel).

Oxyothrips ajugæ, Uzel.

Oxyothrips ajugw, Uzel, Mon. der Ordn. Thysanoptera, p. 136, pl. v, fig. 67, 1895.

Very local and scarce, in the flowers of the common bugle (*Ajuga reptans*), Ravensworth, Winlaton Mill, and Gibside, Co. Durham. May and June.

Distribution. Bohemia (Uzel).

Oxyothrips parviceps, Uzel.

Oxyothrips parviceps, Uzel, Mon. der Ordn. Thysanoptera, p. 139, pl. vi, fig. 72, 1895.

Apparently widely distributed, occurring in the flowers of heather and heath (Calluna vulgaris, Erica tetralix, &c.), Brodick. Arran; Colintraive and Ormidale in the Kyles of Bute; Annan, in the Solway district; Gibside, Co. Durham, and Haydon Bridge, Northumberland.

Distribution. Bohemia (Uzel).

Uzeliella, gen. nov.

On February 25th, 1907, at a Meeting of the Royal Physical Society, Edinburgh, 1 had the pleasure of provisionally describing under the name of *Carinopleuris lubbocki* an apterous and primitive creature which was then thought to be a new type of insect. It undoubtedly belongs to the *Thripidæ*.

The \circ is like *Aptinothrips*, wingless and without ocelli, differing however from the species of that genus in having the abdomen laterally keeled, and in the form of the antennæ, which are six-jointed, the third joint being strongly transverse and broader than the preceding, and the sixth joint broadly pear-shaped. Further, the saw-like ovipositor is evidently laterally broader than in *Aptinothrips* and has the front outwardly-curved edge more strongly serrate.

Uzeliella lubbocki, sp. nov.

Length, '75 mm., yellowish-brown, linear, parallel-sided, body smooth and shining, though slightly ragose transversely. Very much like a small example of Aptinothrips rafa, Gmel., but easily differentiated by the above generic characters.

A single \mathfrak{P} taken amongst thrown-up seaweed whilst searching for maritime *Collembola* at Whitley Bay, Northumberland, October, 1906. I have since that date repeatedly searched the locality for further specimens, but without success, the exact spot having un-

6 [January,

fortunately been spoilt by drainage operations. It is as a rule very unsatisfactory to have to describe a new species from a solitary specimen and it is for that reason that I have withheld publication so long, even now, owing to the fact that the type-slide was slightly damaged in the post, I therefore prefer to regard the above description as merely provisional. I have pleasure in naming the species in honour of Lord Avebury, to whose kindness I owe much.

Aptinothrips rufa, Gmel., var. connaticornis, Uzel.

This variety differs from the type in having the three apical antennal segments connate, thus forming a single joint. Winlaton Mill, Co. Durham.

Aptinothrips nitidula, Hal.

A very small form described by Haliday in 1836 (Ento. Mag., vol. iii, p. 446) which does not seem to have been met with by any other naturalist. In July of this year I found the species on the Arran coast, where it occurs on the Sea-Aster (Aster tripolium), and, I think, the Sea-Milkwort (Glaux maritima). Haliday suggested that its food-plant was the Sea-Plantain (Plantago maritima).

Heliothrips femoralis, Reuter.

Heliothrips femoralis, Reuter, Med. af. Soc. p. Fauna et Flora Fennica, xvii, p. 165, 1891: Uzel, Mon. der Ordn. Thysanoptera, p. 170, 1895: Bergroth, Ann. Soc. Ent. Belgique, xl, p. 67, 1896: Hinds, North American Thysanoptera, p. 172, 3, pl. v and vi, figs. 55 to 57, 1903: Heliothrips cestri, Pergande, Ins. Life, vii, No. 5, pp. 390, 1, 1895.

A hothouse species, very distinct from the common *H. hæmorr-hoidalis*, Bouché. Since taking this insect in one of Mr. Cookson's orchid houses at Wylam-on-Tyne, Northumberland (VIII.07), I have seen an example captured by Mr. C. O. Waterhouse at Acton (22. VIII.06) and now in the British Museum.

Distribution. Finland (Reuter) and North America (Pergande and Hinds).*

Parthenothrips dracænæ, Heeger.

Heliothrips dracænæ, Heeger, Sitzungsb. d. Akad. d. Wiss. Wien, ix, p. 365, 1852: Jordan, Zeitschr. f. Wiss. Zool., 1888, p. 47: Reuter, Thysanoptera, i, Finska Orangerier, p. 166, 1891: Thrips dracænæ, Regel, Bull. Phys. Math. Acad. St. Petersb., 1858, p. 632, figs. 4 and 5: Parthenothrips dracænæ, Uzel, Mon. der Ordn. Thysanoptera, p. 170, pls. ii and vi, figs. 12—14, and 93, 1895: Hinds, North American Thysanoptera, p. 176, pl. vi, figs. 62—65.

Another typical hothouse form of wide distribution; there is a single carded specimen in the British Museum, taken by Mr. C. O. Waterhouse at Acton. I would here take this opportunity of expressing my gratitude to him for his kindness in allowing me to examine this and many more interesting species of *Thrips*.

Distribution. Vienna (Heeger and von Frauenfeld), Finland (Reuter), Bohemia (Uzel), St. Petersburg (Regel), Germany (Jordan and Bohls) and North America (Pergande and Hinds).*

Thrips communis, Uzel.

Thrips communis, Uzel, Mon. der Ordn. Thysanoptera, p. 176, pl. vi, fig. 100, 1895.

I have beaten a large number of this small insect from the bittersweet (Solanum dulcamara) and potato plant (Solanum tuberosum), Shalwell, Hart, and Blaydon, Co. Durham. This and the following species are apparently attached to the leaves and flowers of the Solanaceæ.

Distribution. Bohemia (Uzel).

Thrips major, Uzel.

Thrips major, Uzel, Mon. der Ordn. Thysanoptera, p. 179, 1895.

Taken in company with, and in the same localities as, *T. communis*, also at Haydon Bridge, Northumberland, October.

Distribution. Bohemia (Uzel).

It must be acknowledged that there is some considerable difficulty in the identification of the species of certain genera, notably *Thrips sensu strictu* and *Euthrips (Physopus)*. I have gone very carefully into the identification of the species herein noted and not only do they agree (so far as I may be allowed to judge) with Uzel's published descriptions, but the habitats of the different forms are identical.

Prof. Uzel has very generously promised me co-types of a number of his species, which will be invaluable in the working out of my own captures, as well as in settling the determination of some of Haliday's species which (owing to meagre descriptions) have not as yet been satisfactorily classified.

The Groves, Winlaton-on-Tyne:
November 20th, 1907.

 $^{^{\}star}$ In November of this year (1907) I discovered both II. femoralis, Reut., and P. dracenee Hoeger, in large numbers in Brussels and Antwerp, Belgium.—R. S. B.